

WHAT IS CLAIMED IS:

1. An ink-jet recording apparatus comprising:
a plurality of rollers;
5 a conveyor spanned the plurality of rollers for conveying a record medium thereon, the conveyor including a conveying surface on which a record medium is conveyed, a flushing region onto which ink is ejected when flushing is performed, and an opening
10 arranged adjacent to the flushing region;
an ink-jet head arranged confronting the conveyor belt, for ejecting ink onto the flushing region of the conveyor belt;
an ink mover for moving ink ejected from the
15 ink-jet head onto the flushing region toward the opening, the ink mover arranged confronting the conveyor belt; and
an ink retainer for retaining ink moved by the ink mover and passed through the opening, the ink
20 retainer arranged confronting the ink mover under the conveyor belt.
2. The ink-jet recording apparatus according to claim 1, wherein the ink mover is selectively either
25 at a first position spaced apart from the conveyor

belt or at a second position in contact with the flushing region of the conveyor belt.

3. The ink-jet recording apparatus according to
5 claim 1, wherein the ink mover comprises a flat plate.

4. The ink-jet recording apparatus according to
claim 1, wherein the ink mover is in contact with the
flushing region across the whole width of the conveyor
10 belt.

5. The ink-jet recording apparatus according to
claim 1, wherein the ink mover is formed from a flexible
material and wherein the ink mover contacts with the
15 flushing region with bending.

6. The ink-jet recording apparatus according to
claim 3, wherein the ink mover moves ink toward the
opening in making the flat plate rubbed the flushing
20 region.

7. The ink-jet recording apparatus according to
claim 1, wherein the ink mover is of a V-shape, the
each lines of the V shape inclined each other, from
25 respective ends to a center in a width direction of

the conveyor belt, toward upstream of a direction in which ink is moved by the ink mover.

8. The ink-jet recording apparatus according to claim 1, wherein the ink mover includes a first flat plate and a second flat plate,

the first flat plate inclined, from one end to the other end in a width direction of the conveyor belt, toward upstream of a direction in which ink is moved by the ink mover,

the second flat plate inclined, from the other end to the one end in a width direction of the conveyor belt, toward upstream of a direction in which ink is moved by the ink mover.

15

9. The ink-jet recording apparatus according to claim 8, wherein the first and the second flat plates are in contact with each other.

10. The ink-jet recording apparatus according to claim 8, wherein the first and the second flat plates overlap with each other in the width center of the conveyor belt.

11. The ink-jet recording apparatus according to

claim 1, wherein the flushing region has a water repellency .

12. The ink-jet recording apparatus according to
5 claim 1, wherein the flushing region has a water repellency providing a contact angle of 15 degrees or more.

13. The ink-jet recording apparatus according to
10 claim 1, wherein the flushing region is recessed from the conveying surface.

14. The ink-jet recording apparatus according to
claim 1, wherein the flushing region is arranged at
15 the downstream of the opening in the running direction of the conveyor belt.

15. The ink-jet recording apparatus according to
claim 1, wherein the opening has meshes.
20

16. An ink-jet recording apparatus comprising:
a plurality of rollers;
a conveyor spanned the plurality of rollers for
conveying a record medium thereon, the conveyor
25 including a conveying surface on which a record medium

is conveyed, a flushing region onto which ink is ejected when flushing is performed, and an opening arranged adjacent to the flushing region;

an ink-jet head arranged confronting the
5 conveyor belt, for ejecting ink onto the flushing region of the conveyor belt;

a sensor for sensing a position of the opening included in the conveyor belt;

an ink mover for moving ink ejected from the
10 ink-jet head onto the flushing region toward the opening, the ink mover arranged confronting the conveyor belt;

a drive mechanism for moving the ink mover to a position where the ink mover is in contact with the
15 flushing region, based on a position of the opening sensed by the sensor and on a running speed of the conveyor belt; and

an ink retainer for retaining ink moved by the ink mover and passed through the opening, the ink
20 retainer arranged confronting the ink mover under the conveyor belt.

17. The ink-jet recording apparatus according to claim 16, wherein the drive mechanism moves the ink
25 mover while the conveyor belt is running.